

Remarks

Claims 1 - 39 are in the application. Claims 1, 5 and 14 are amended, and claims 23 - 39 are newly added. No new matter is introduced by any of the amendments, and entry thereof is respectfully requested. Claims 19 - 21 are withdrawn from consideration. Claims 1 - 18 and 22 - 39 are now under consideration in the application.

Reconsideration of the application is respectfully requested, in view of the following remarks.

Applicants' invention is directed to improved sliders for use in magnetic recording and retrieval apparatus.

One conventional type of slider (*see*, Applicants' FIG. 1C, and page 2, line 10 - page 3, line 2) has the read and write elements embedded in a single raised pad, centrally located at or near the trailing edge of the slider, and other features of the air bearing surface of the slider are generally symmetrical. The slider tends to roll about a generally lengthwise central axis (the "roll axis") as it flies over the surface of the data storage media. Such roll has comparatively little effect on the fly height of the centrally located read and write elements.

Conventional "side rail sliders" (*see*, Applicants' FIG. 1F, and page 4, line 7 - page 4, line 24) make use of a greater amount of available disk surface area. **Conventional slide rail sliders have two pads at or near the trailing edge of the slider, one at each trailing edge corner, and the read and write elements are embedded in one of the two corner pads.** This allows read and write operations right up to the outer edge of the disk. **However, the roll axis in the conventional slide rail slider is a generally lengthwise central axis, midway between the two corners, so the fly height at the corners can be significantly affected by roll, resulting in degraded performance.**

Applicant's invention features a slider having **a single pad located at one corner of the trailing edge of the slider**, in which the read element and the write element are embedded. Having the read and write elements near one edge of the slider allows for use of a greater amount of disk surface area than having the read and write elements in the center. The single pad at the trailing edge of the slider is the area of highest pressure on the air bearing surface. **By having only one pad, the location of the roll axis of the slider is shifted toward the pad and, thus, toward the location of the read and write elements. According to the invention the fly height of the**

slider at the location of the read and write elements is less affected by roll, providing improved performance.

Applicants thank the Examiner for conducting a telephone interview with Applicants' representative, undersigned, on April 1, 2004, and for his helpful suggestions regarding amendments to the claims.

Independent claims 1, 5 and 14 as amended herein call out a roll axis, and recite that, according to the invention, the roll axis is shifted toward the pad (claims 2 - 4, 6 - 13 and 15 - 18 depend, directly or indirectly, from the amended independent claims). New claims 22 - 39 track the language of original claims 1 - 18, and these claims (particularly, independent claims 22, 26 and 35; the remaining claims depend from these, directly or indirectly) recite that there is no additional pad situated on the area of the base surface between the pad and the corner defined by the trailing edge and the second side of the slider.

It was agreed in the telephonic interview that none of the art of record teaches or suggests a slider in which the roll axis is shifted toward a pad in which the sensor elements are disposed; and it was agreed that none of the art of record teaches or suggests a side rail slider having no additional pad on the area of the base surface between the pad and the opposite trailing edge corner, as recited in the new claims.

In view of the foregoing, all the claims in the application are believed to be in condition for allowance, and action to that effect is respectfully requested.

If the Examiner determines, upon receipt of this communication, that a further conference would facilitate prosecution of this application, the Examiner is invited to telephone Applicants' representative, undersigned, at the telephone number set out below, while he is in possession of the file.

This Amendment is being filed within the three months' shortened statutory period set by the Examiner for response and, accordingly, it believed that no extension of time or fee therefor is required in connection with the filing of this paper. In the event the Examiner may determine that an extension of time be required in connection with this paper, Petition is hereby made therefor, and the Commissioner is authorized to charge any fee therefor, or any other additional fee the Examiner may determine may be required in connection with this paper, to Deposit Account No. 50-0869 (Order No. RDRT 1016-1).

Respectfully submitted,


Bill Kennedy

Reg. No. 33,407

Reg. No. 33,407

Haynes Beffel & Wolfeld LLP
P.O. Box 366
Half Moon Bay, CA 94019
Telephone: (650) 712-0340